

WHAT IS CLAIMED IS:

1. An information handling system with automatic fail-over capabilities for network communications, the
5 information handling system comprising:
a first switch with a server-side port and a switch-side port, the server-side port in communication with a server;
a second switch in communication with the server;
10 a fail-over circuit in the first switch in communication with the server-side port; and
a status circuit in the first switch in communication with the fail-over circuit;
wherein the status circuit communicates link status
15 of the switch-side port to the fail-over circuit;
wherein the fail-over circuit automatically disables the server-side port, in response to receiving a link status of down from the status circuit; and
wherein the second switch automatically takes over
20 for the first switch, in response to disablement of the server-side port of the first switch, such that the first switch automatically fails over to the second switch in response to the link status of down on the switch-side port of the first switch.

25

2. The information handling system of Claim 1, wherein the first switch automatically disables the server-side port substantially in real time.

3. The information handling system of Claim 1,
further comprising:

a server with a team of network interface devices
(NIDs) in communication with the first and second
5 switches, wherein the server automatically utilizes the
second switch in lieu of the first switch, in response to
disablement of the server-side port of the first switch.

4. The information handling system of Claim 1,
10 further comprising:

multiple server-side ports in the first and second
switches.

multiple servers, each containing a team of network
interface devices (NIDs) in communication with the first
15 and second switches, wherein each team of NIDS
automatically utilizes the second switch in lieu of the
first switch, in response to disablement of the server-
side ports of the first switch.

20 5. The information handling system of Claim 1,
further comprising:

a switch-side port in the first switch;
a switch-side port in the second switch; and
an external switch in communication with the switch-
25 side ports in the first and second switches via
respective first and second uplinks.

6. The information handling system of Claim 5, wherein the fail-over circuit automatically disables the server-side port, in response to failure of the first uplink.

5

7. A network switch with automatic fail-over capabilities for network communications, the network switch comprising:

- a switch-side port;
- 10 a server-side port;
- a fail-over circuit in communication with the server-side port; and
- a status circuit in communication with the fail-over circuit;
- 15 wherein the status circuit communicates link status of the switch-side port to the fail-over circuit; and
- wherein the fail-over circuit automatically disables the server-side port, in response to receiving a link status of down for the switch-side port from the status
- 20 circuit.

8. The network switch of Claim 7 further comprising:

- a selection circuit in communication with the fail-
- 25 over circuit, wherein the selection circuit, when activated, prevents the fail-over circuit from disabling the server-side port in response to receiving a link status of down for the switch-side port.

9. The network switch of Claim 7, wherein:
the fail-over circuit automatically enables the
server-side port, in response to receiving a link status
of up for the switch-side port from the status circuit.

5

10. The network switch of Claim 7, further
comprising multiple server-side ports.

11. The network switch of Claim 10, further
10 comprising multiple fail-over circuits that automatically
disable the multiple server-side ports in response to
receiving a link status of down for the switch-side port.

12. A method of providing automatic fail-over
15 between switches in a network, the method comprising:
monitoring link status of a switch-side port of a
switch;

in response to detecting a link status of down on
the switch-side port, automatically disabling a server-
20 side port of the switch.

13. The method of Claim 12, wherein the operation
of automatically disabling the server-side port
comprises:

25 automatically disabling the server-side port in
substantially real-time.

14. The method of Claim 12, wherein the operation of automatically disabling the server-side port comprises:

5 automatically triggering a fail-over circuit in the switch to disable the server-side port.

15. The method of Claim 12, further comprising:
after automatically disabling the server-side port, continuing to monitor the link status of the switch-side
10 port of the switch;

in response to detecting a link status of up on the switch-side port of the switch, automatically restoring the server-side port of the switch.

15 16. The method of Claim 12, wherein the switch comprises a first switch in the network, the method further comprising:

monitoring link status of the server-side port of the first switch; and

20 in response to detecting the link status of down on the server-side port of the first switch, automatically failing over from the first switch to the second switch.

17. The method of Claim 16, further comprising:
25 after automatically disabling the server-side port of the first switch, continuing to monitor the link status of the switch-side port of the first switch;
in response to detecting the link status of up on the switch-side port of the first switch, automatically
30 restoring the server-side port of the first switch.

18. The method of Claim 17, further comprising:
in response to detecting the link status of up on
the server-side port of the first switch, automatically
resuming communication with the first switch.

5

19. The method of Claim 12, further comprising
automatically disabling a server-side port of the switch
during a boot process of the switch.

10

20. The method of Claim 12, further comprising
automatically disabling a server-side port of the switch
in response to failure of the switch.